

Patent Office Canberra

I, LEANNE MYNOTT, MANAGER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2003906533 for a patent by CARINYA MANUFACTURING CO PTY LTD as filed on 26 November 2003.



WITNESS my hand this Eighth day of December 2004

LEANNE MYNOTT

MANAGER EXAMINATION SUPPORT

AND SALES

BEST AVAILABLE COPY

54536 GEH:PFB

P/00/009 Regulation 3.2

AUSTRALIA Patents Act 1990

ORIGINAL

PROVISIONAL SPECIFICATION FOR AN INVENTION **ENTITLED**

Invention Title:

IMPROVEMENTS IN BRACKET STRIPPING

Name of Applicant:

CARINYA MANUFACTURING CO PTY LTD

Address for Service:

COLLISON & CO. 117 King William Street, Adelaide, S.A. 5000

The invention is described in the following statement:

5

This invention relates to brackets, and more particularly to the production of brackets to suit particular requirements.

Brackets to hold, support or join various components are well known and are available in a wide variety of shapes and sizes. However a person in the field often is confronted with a situation where a particular bracket is required. Usually the person would carry brackets which may normally be required in the situation in the field, but it is often not feasible for the person to carry a supply of every type of bracket which may be required in that particular situation.

Thus the person often has to try to modify an existing bracket, or to try to obtain a piece of sheet material and try to make a suitable bracket using the limited tools available. For example it is often difficult in situations such as this to bend the sheet material to form a right angle with the bend being a tight sharp bend. This is particularly so when the sheet material has to be bent or folded in more than one plane.

Thus it is an object of this invention to provide a sheet material suitable for making a bracket or connecting plate or element, which bracket can be made on site or in the field to suit the individual requirements.

It is a further object of the invention to provide a sheet of metal suitable for making a bracket, the sheet being provided with at least one series of apertures to facilitate the making of a bracket, joiner or connecting element.

It is a further object of the invention to provide a metal sheet having at least one series of apertures aligned longitudinally and laterally of the sheet of metal.

25 It is a still further object of the invention to provide a sheet of metal suitable for forming at least one bracket, connector or joiner there from, said sheet of metal having a series of diamond or rectangular shaped apertures therein, said diagonals of the apertures being longitudinal of the sheet and lateral to the sheet.

Thus there is provided according to the invention a sheet of material suitable for making a bracket, connector joiner or like object, said sheet of material including at least one series of apertures to facilitate the construction of at least one bracket, connector or joiner there from.

Preferably the sheet of material is a metal sheet.

5

20

25

Preferably the series of apertures are arranged longitudinally and laterally of the sheet of material.

Preferably the at least one series of apertures are diamond or square in shape.

Preferably the diamond or square apertures are arranged with the diagonals longitudinal and lateral of the sheet to facilitate the folding and cutting of the sheet.

Preferably there is a further series of apertures, preferably round for the receipt of fastening means to fasten the bracket, joiner or connector.

Also there is provided according to the invention a method of constructing a bracket, joiner or fastener including the steps of providing a metal sheet having at least one series of apertures arranged longitudinally and laterally of the sheet, and cutting and/or folding the metal sheet along selected portions of the series of apertures.

Preferably the at least one series of apertures are diamond or square shaped with the diagonals of the apertures are longitudinal and lateral of the sheet, and folding and/or cutting the sheet along selected diagonals of selected apertures.

In order to more fully describe the invention reference will now be made to the accompanying photographs wherein:-

Page 1 shows a sample of the sheets of metal available, either flat or angle,

Page 2 shows examples of a sheet of metal being bent,

5 Page 3 shows examples of cutting the sheet, and

10

15

Page 4 shows examples of cutting and bending a sheet.

Referring to the photographs the metal sheet is shown with a series of spaced rows of diamond shaped holes extending along the sheet of metal. Preferably the longitudinal spacing of the diamond holes in each row is 25mm and the spacing between the rows, with the diamond holes extending laterally across the sheet at right angles to the rows is 20mm, this gives the user maximum bracket size options. It is also our intention to produce this product with other hole spacing options. The sheets can be produced in various lengths and widths, either flat, or as shown in page 1 at an angle either in the centre of the sheet or along any portion of the sheet including an edge of the sheet.

Each of the diamond shaped holes are so arranged that one of the diagonals of each hole extend in the longitudinal direction of the sheet and the other diagonal extends at right angles thereto laterally of the sheet.

The dimensions of the diamond shaped holes and the spacing between the holes both longitudinally of the sheet and laterally of the sheet is such that the metal sheet can be folded and bent along either of the diagonals by hand without the necessity of requiring any sophisticated tools or implements. The bending results in a clean sharp bend in a straight line. This is clearly shown in page two of the photographs. The bending follows the diagonals of the holes.

The diamond holes can be used to attach the bracket to the elements or structure. However it is preferred to provide a second series of round holes

which can be used to attach the formed bracket to elements or the structure. As shown the second series of holes are round, each row of the round holes being spaced between the rows of diamond holes both longitudinally and laterally of the sheet.

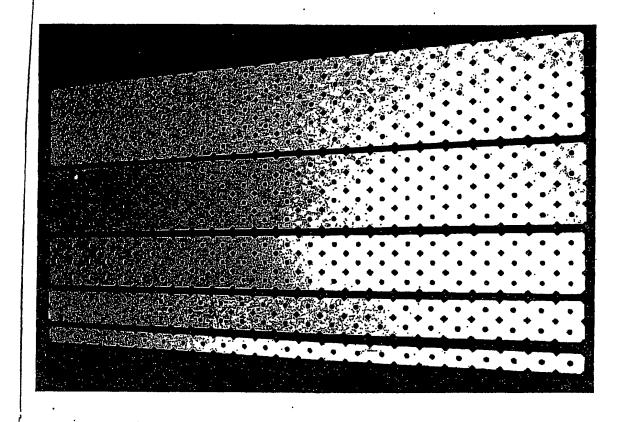
As shown in the photographs sheet can be bent and cut to various shapes with the bends shown at right angles. However it is to be realised in some situations the sheet portion can be bent into angles other than at right angles to either acute or obtuse angles. The sheet can be bent into channel shapes, and a channel with side flanges. Thus by a combination of cutting and folding brackets can be shaped on site to suit a particular situation.

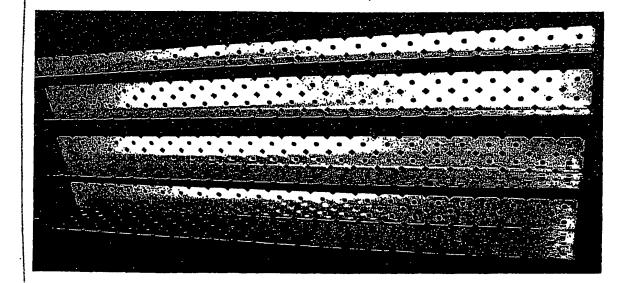
The sheet can be bent by hand, and if a very tight angle is required, the bend can be made by using either one or two pairs of pliers.

Thus there is provided according to the invention a means for making a bracket on site by the provision of a sheet material having rows of diamond shaped holes whereby the sheet can be easily folded along the diagonals of the holes.

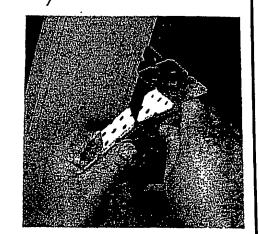
Dated this 26th day of November 2003

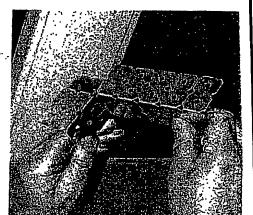
CARINYA MANUFACTURING CO PTY LTD
By their Patent Attorneys,
COLLISON & CO.

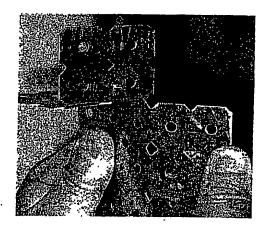






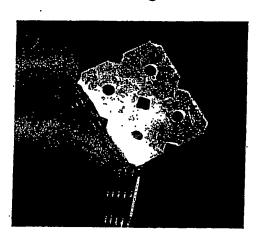


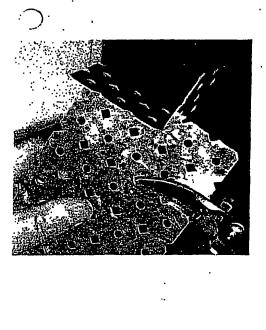


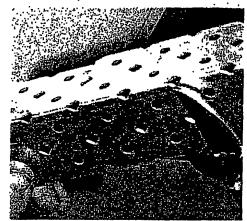


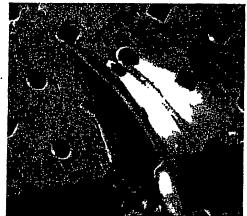


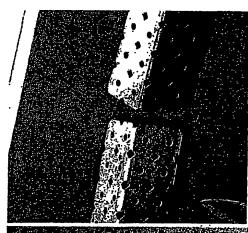
M

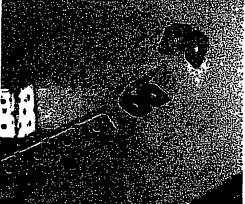




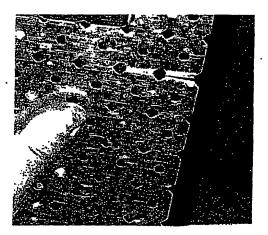


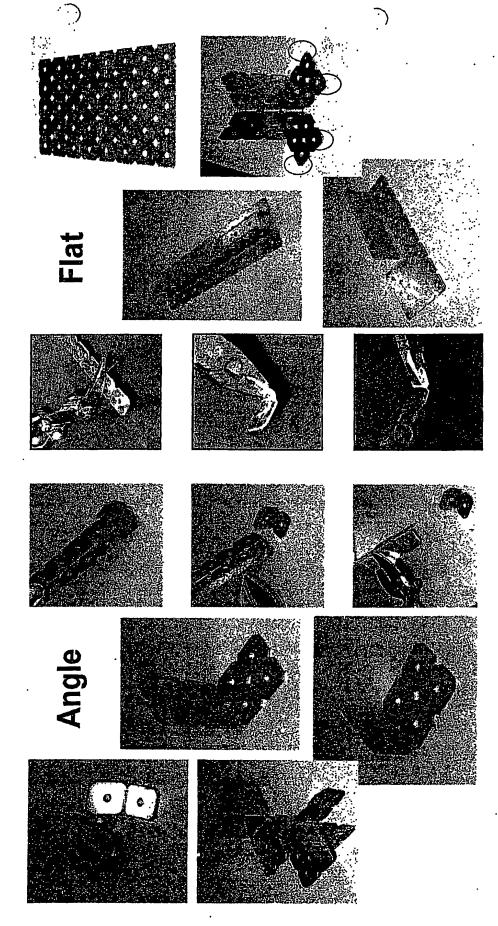






 ω





Just cut or bend to size. 4

Document made available under the **Patent Cooperation Treaty (PCT)**

International application number: PCT/AU04/001625

23 November 2004 (23.11.2004) International filing date:

Document type:

Certified copy of priority document

Document details:

Country/Office: AU

Number:

2003906533

Filing date: 26 November 2003 (26.11.2003)

Date of receipt at the International Bureau: 13 December 2004 (13.12.2004)

Priority document submitted or transmitted to the International Bureau in Remark:

compliance with Rule 17.1(a) or (b)



This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:
BLACK BORDERS
MAGE CUT OFF AT TOP, BOTTOM OR SIDES
FADED TEXT OR DRAWING
BLURRED OR ILLEGIBLE TEXT OR DRAWING
SKEWED/SLANTED IMAGES
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
☐ GRAY SCALE DOCUMENTS
LINES OR MARKS ON ORIGINAL DOCUMENT
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
□ other:

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.